Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1 – 11 (Cancelled)

12. (Previously Presented) A method of fabricating a semiconductor device having a ferroelectric capacitor, comprising the steps of:

forming an active device element on a substrate;

forming an insulation film over said substrate to cover said active device element;

forming a lower electrode layer of said ferroelectric capacitor over said insulation film, such that said lower electrode is formed on a layer containing Ti;

forming a ferroelectric film on said lower electrode as a capacitor insulation film of said ferroelectric capacitor;

crystallizing said ferroelectric film by applying a thermal annealing process in an O_2 atmosphere under a reduced total pressure in the range between 1 Torr and 40 Torr such that peeling of the ferroelectric film is substantially reduced; and

forming an upper electrode layer on said ferroelectric film.

Claims 13 – 14 (Cancelled)

15. (Currently Amended) A semiconductor device, comprising:

a substrate;

an active device element formed on said substrate~~, said active device including a ferroelectric capacitor~~;

an insulation film provided over said substrate to cover said active device element;

~~said ferroelectric capacitor comprising:~~

a lower electrode containing Pt provided over said insulation film;

a PZT ferroelectric film provided on said lower electrode, said PZT ferroelectric film having a columnar microstructure extending from an interface between said lower electrode and said PZT ferroelectric film in a direction substantially perpendicular to a principal surface of said lower electrode, said PZT ferroelectric film generally having a <111> orientation extending continuously from a bottom surface of said PZT ferroelectric film to a top surface of said PZT ferroelectric film and consisting of crystal grains generally having said <111> orientation and a substantially uniform grain diameter of less than about 200nm; and

an upper electrode provided on said PZT ferroelectric film,

wherein a grain boundary of said crystal grains of said PZT film is staggered with respect to a grain boundary of crystal grains in said lower electrode.

16. (Previously Presented) A semiconductor device as claimed in claim 15, wherein said crystal grains constituting said PZT ferroelectric film have an average diameter of about 150 nm.

17. (Original) A semiconductor device as claimed in claim 15, wherein said lower electrode comprises a Ti layer and a conductor layer provided further on said Ti layer.

Claims 18 – 28 (Cancelled)